

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Precision Technology Inc

Manufacturers Resource Center

Precision Technologies Uses Lean Techniques To Make Remarkable Comeback

Client Profile:

Precision Technologies, Inc., located in Douglassville, Pennsylvania, is a privately owned manufacturer of quality investment castings for a number of different industries, including food processing, aerospace, chemical, nuclear, pulp processing, sporting goods, military, and machinery manufacturing. The company's less than 100 employees specialize in the manufacture of complex parts with intricate configurations, extremely tight tolerances, and fine surface finishes. Additionally, Precision Technologies offers a wide range of materials including stainless steel, high-alloy steel, low-alloy steel, special purpose alloys, and carbon steels.

Situation:

Today, Precision Technologies, Inc. (PTI) generates a healthy \$5 million in annual sales, but that wasn't always the case. In fact, just three years ago the company was about to go out of business. Excessive inventory at the 30,000 square foot facility was a major problem. Orders lost in the maze of inventory on the floor would end up being produced twice. As a result, delivery time was less than 65 percent and customers were constantly complaining. When new owner Greg Wolf purchased the company in 1999, he attended a lean manufacturing seminar hosted by the Manufacturers Resource Center (MRC), a NIST MEP network affiliate. He realized that lean techniques could improve the company's processes and save it from closing, so he asked MRC to help PTI implement its own lean program.

Solution:

MRC toured the facility, analyzed PTI's current processes, and sat down with the management team to outline a plan to begin implementing lean manufacturing. MRC also helped PTI apply for Pennsylvania's Workforce and Economic Development Network (PA WEDnet) grant funding, which helps companies invest in additional training for their employees.

First, MRC conducted a half-day lean awareness workshop to demonstrate the tools and techniques needed to identify and eliminate waste. Then, MRC spent two days with PTI using the value stream mapping (VSM) technique to illustrate the production and information processes from beginning to end. The VSM event visually depicted the current state, as well as a future improved state envisioned by the company. The current state reflected a lead-time of 28.7 days, while the future state depicted a lead-time of just six days.

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MRC developed an implementation plan and teams of PTI employees were assigned to each targeted improvement. Improvements included the development of work cells, which dramatically reduced work in process materials. At the same time, it increased throughput. In just three months, PTI had implemented all of the improvements identified on the value stream map, and the results were phenomenal.

Results:

- Reduced work-in-process inventory by 80 percent.
- Increased on-time delivery from 65 to 95 percent.
- Reduced lead times from six weeks to six days.
- Dramatically reduced overtime and improved financial results.
- Improved product quality.

Testimonial:

"Overall, we are an excellent example of what positive results can happen when lean manufacturing techniques are properly applied utilizing the expertise available at the Manufacturers Resource Center."

Greg Wolf, President